

## SUMMARY & CONCLUSION

Injuries of The Cervical Spinal Cord are a major neurosurgical problem since the sequelae of such injuries are frequently devastating with respect to long term disability for the patient. The majority of spinal cord injuries are transport related, with motor vehicle collisions being the chief cause.

Cervical Spinal cord injuries may or may not be associated with cervical spine trauma. Cord injuries may be in the form of concussion, compression, contusion, laceration, ischaemia or haemorrhage.

The classification of patients with cervical spinal cord injuries to those with an incomplete lesion in whom there is some preservation of sensation and motor power caudal to the level of injury and those with a complete lesion in whom there is no evidence of sensation or most reliable method of categorizing patients with cervical cord injuries. While, the classification according to the description of traumatic spinal cord syndromes has drawbacks. These include, the fact that the patient may have components of a number of syndromes, and that such traumatic syndromes are not controlled for the amount of spinal cord damage other than in a descriptive manner.

The symptoms of patients with cervical cord injuries varies according to the spinal cord trauma. It may be:

- 1- Complete transverse myelopathy in which all functional activities below the level of the lesion are lost.
- 2- A second clinical syndrome in which all voluntary motor activities are lost with absence of sensations below the level of lesion.

- 3- The third most common clinical syndrome is central cord syndrome where, one observe disproportionate weakness in upper extremities below the level of lesion when compared with the lower extremities, and sensory loss is usually minimal.
- 4- The well known brown- sequard syndrome of hemisection of the spinal cord is not commonly observed.

Optimal treatment of patients with cervical spinal cord injuries is dependent upon good clinical evaluation and accurate radiographic assessment which include, plain x-ray, myelograophy, computerized tomography, magnetic resonance imaging and sometimes electro-myorgaphy and nerve conduction studies.

The management of patients with cervical cord injuries is aiming at three goals:

- 1- Providing optimum condition to the cord to recover.
- 2- Decompression in cases of compression by bony elements or haematomas.
- 3- Fixation in cases of instability to prevent further cord injuries.

The management of cervical spinal cord injury, should include the following:

- 1- Emergency card.
- 2- Acute care: Medical/ Surgical management.
- 3- Respiratory care.
- 4- Bladder and bowel management.
- 5- Pressure sores: Prevention and management.
- 6- Physiotherapy and rehabilitation.
- 7- Follow- up care.

**Conclusion:**

The cervical spine must be immobilized in any patient who is suspected of having a cervical spine injury until the injury is excluded. Methylprednisolone is the only treatment that has been suggested in clinical trials to improve outcomes in patients with acute, nonpenetrating TSCI. The two main goals of surgery in spinal trauma are decompression of neurological elements, and stabilization of a destabilized segment.